ILLUSTRATIVE DESIGN GUIDELINES FOR OFFICE DEVELOPMENT

The purpose of this guide is to provide a helpful illustration of the objectives and action strategies contained in the Comprehensive Plan Update concerning the promotion of high-quality office buildings within the County. This guide does not preclude any authority of the Zoning Ordinance, the Design and Constructions Standards Manual or the Uniform Building Code. Should there be any questions, please contact the Planning Department at (703) 792-6830.

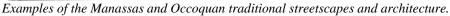
Introduction

It is especially important – for Prince William County's economic development goals and in the interests of an attractive built environment – that the County seeks the highest design standards for new office buildings. Some developers may choose to build a traditional design. In other cases, and in appropriate and/or in key locations in the County, an innovative, modern building may be designed. These high-design pieces of architecture (or "signature" buildings) should be of the highest caliber and should demonstrate the true art in architectural design. Examples of signature buildings in the caliber encouraged are provided on the last page of these guidelines. Whether utilizing traditional or more modern architecture, the design of the office building should generally embody the proper use of the five architectural design fundamentals, including: scale, order, balance, rhythm, and proportion.

In addition, color and light, sun and shadow patterns are often considered in order to better define the design fundamentals. The building architecture is encouraged to incorporate state-of-the-art building technologies with the finest design and support facilities available. In response to an ever-changing market, buildings are encouraged to be highly functional and flexible, to create timeless architecture. Streetscape designs are encouraged to emulate the historic and cultural elements found in nearby communities such as Occoquan and Manassas. Samples of building materials, models of the proposed development, and/or computer simulations of building appearance may be requested so that staff, the applicant, the Planning Commission, and the Board of County Supervisors can work together to achieve high-quality that will enhance the community.







Community Design Objectives

- To create high-quality office buildings that enhance the character of the County, its historical landmarks, important natural land features, and residential neighborhoods.
- To utilize high-quality architectural and urban design to create a cohesive and attractive environment for people who live, work, and visit the County. This includes coordinating development between neighboring parcels.
- To enhance the County's identity and strong sense of community, allowing the County to become a destination rather than a pass-through suburb.
- To set high standards for architectural and site design by first designing high-quality civic buildings that express both dignity and permanence. These public buildings will then serve to foster high-quality future development, in turn strengthening identity and a sense of place.







Examples of civic buildings that express dignity and permanence.

• To discourage the standard "cookie-cutter" design, by encouraging customized, place-responsive buildings.



Example of a **cookie-cutter office development** that is **not place responsive**.



Example of a site-specific office development – Tower element anchors the triangular site.

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Building Design

Scale

The perceived scale of a building may be controlled through careful siting and the architectural treatment at the ground level. Scale and visual impact may also be controlled by breaking larger volumes into smaller components through the use of architectural detailing which relates:

- *The size of building parts to the whole building.*
- *The size of building parts compared to the human figure.*
- The size of the building in relationship to its setting.



Example of an office building with **no scale** relationship to its setting.



Example of buildings with a **good scale relationship** to the human figure and to each other.

DES - Strategy 1: Buildings are encouraged to have a human scale at the street level.

DES - Strategy 2: Buildings are encouraged to be articulated vertically as well as horizontally, in order to break up their mass.



Good scale relationships – Entrance portico is used to break down the scale of the building at street level.



Good scale relationships – Notches, offsets, and changes of material are used to reduce the scale of the tower element.

DES - Strategy 3: Buildings are encouraged to utilize simple geometric shapes in plan and in elevation. Buildings are encouraged to be articulated in both plan and vertical elevation, by using offsets to, for example, provide recesses or projections of the facade in the form of offsets, notches, openings, balconies, bay windows, etc. or change of material or color of material. The building is encouraged to be articulated through the use of changes in material that create visual character at intervals.

Visual Order

Order is the consistency of balance, rhythm, and proportion among architectural components. Order understands the relationships between the parts of a building as well as relationships between buildings in a complex. Traditional Virginia architecture, for example, through the use of distinct symmetries, illustrates hierarchies between central entrances and adjoining wings. In addition, the use of consistent window and door heights can contribute to overall unity of the design.



Good visual order - Use of symmetry and emphasis on the entrance



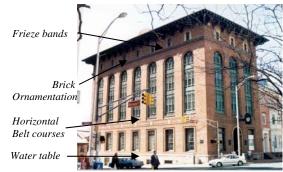
Good visual order - Use of symmetry and consistent window and door heights

Examples of modern office buildings that utilize and creatively interpret traditional architecture

DES - Strategy 4: The building architecture is encouraged to contain a series of overlain orders. Belt courses, horizontal expressions such as a frieze band, cornice line at the parapet or eave of the roof, water tables, stone or brick ornamentation as well as details at the head and sill of windows are strongly encouraged to achieve these ends.



Good visual order - Several overlain layers are used to create an interesting facade



Good visual order - Examples of horizonta expression Lines

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DES - Strategy 5: Building entrances and lobbies are encouraged to be given architectural prominence.



A cylindrical form is used to signify the entrance and give it architectural prominence

DES - Strategy 6: Building wings and additions are encouraged to have similar forms, roof pitch, and architectural character to the main body of the building.

Balance

Balance is achieved through the use of rhythm, repetition, and symmetry.

DES - Strategy 7: The building architecture is encouraged to utilize either a central focal point or, in an asymmetrical facade, more localized symmetry of building parts.



Good balance - Example of a **symmetrical building** and how it emphasizes the central entrance



Good balance - Example of an **asymmetrical façade** that utilizes localized symmetry of window and ground level entranceways

Rhythm

Rhythm is a consistent repetition of building forms or architectural components. Orderly repetition of building elements – including windows, doors, and detailing – contribute to the perceived balance and/or order. By the same token, variations in rhythm are encouraged to be provided to develop visual interest and focal points.

DES - Strategy 8: Buildings are encouraged to incorporate multiple rhythms or cadences (rather than a single repetitive rhythm). These multiple rhythms break down the scale of the building and create an interesting and rich facade.



Use of consistent rhythm - Window and door patterns create rhythm while the circular corner portico breaks the rhythm creating an interesting focal point

Proportion

Proportion is the relationship between building elements. This includes window-to-wall ratios (solid-to-void), window width-to-height ratios, and proportions of buildings to distinct environmental features.

DES - Strategy 9: Buildings are encouraged to reinforce a pedestrian environment with well-defined building elements that create a definitive base, middle section and roof line cornice. This can be done, for example, with three-dimensional elements, such as decorative architectural belt courses and cornices or eaves that project from the building and create interest in the facade. The cornice line is encouraged to be articulated, to create an interesting skyline and building profile with penthouses or other rooftop equipment integrated into the overall building design and mass. A variety of building heights for a block of development is encouraged, to enhance the skyline.



Example of an interesting skyline - Example of an articulated roofline creating an interesting skyline

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DES - Strategy 10: Buildings are preferred to be predominantly masonry (brick, stone, cast stone, pre-cast) and predominantly with punched windows. Exterior openings may vary in size and pattern but are encouraged to be of vertical proportion of one horizontal to two vertical (1:2). Window to wall ratio of the front facade is encouraged to be a minimum of 30% and a maximum of 50%. The proportion of glass to wall is encouraged to be balanced to ensure a predominantly masonry, punched opening facade. Recessed exterior openings to simulate traditional loadbearing walls are strongly encouraged, since they provide interesting shadow lines on the facade. By the same token, strip or ribbon windows are strongly discouraged, since they do not provide an interesting pattern of solid and void on the facade nor do they provide interesting shadow patterns. Reflective glass is also strongly discouraged, as is aluminum siding, vinyl siding, glass curtain walls, or concrete masonry unit building walls.





Examples of buildings that clearly demonstrate definitive pedestrian-friendly bases, middle sections, and roof line cornices as well as the correct proportion of solid to void

DES - Strategy 11: All sides of a building are encouraged to be architecturally consistent with the front facade. Blank, windowless walls are encouraged to be articulated in order to reduce the negative appearance.



A windowless second-story creates **improper proportion** and an overall negative appearance



Good continuity of building facades - Architectural consistency of all building sides

Color and Light

Color and light are two of the most important tools for an architect in trying to better define the five fundamental principles of architecture. The proper use of color and light can better define a building's visual order as well as provide an interesting facade. The improper use of color and light can likewise create a visually and architecturally unappealing building that is a detriment to the natural environment and the community at large.

DES - Strategy 12: Flashy and/or showy colors such as electric blue, neon green, bright red, hot pink, etc. are discouraged. These colors may be appropriate for trim details or in signage, or if they are proven to be an integral and important part of the company's logo and the specific buildings architectural design. The color of all proposed materials should be indicated on the plans submitted at the time the applicant is seeking rezoning approval, according to current Community Design Plan guidelines. Buildings within a land bay shall have compatible, coordinated color schemes.

DES - Strategy 13: Sun and shadow patterns are encouraged to be considered in the design of the façade, as well as in the site design for an entire office development. Shadow patterns should not only be considered on the facade of the building itself but for the public and private outdoor open spaces created by the building in order to encourage their use.

DES - Strategy 14: Lighting fixtures attached to a building or utilized elsewhere on site are encouraged to be architecturally compatible with the building style, with each other, and with the adjacent public streetscape.

DES - Strategy 15: Sites are encouraged to provide adequate lighting while minimizing adverse impacts such as glare and overhead sky glow on neighboring properties. Lighting is encouraged to be used to emphasize a significant building feature in order to enhance a building's nighttime image. To this end, metal halide or color corrected sodium light sources are encouraged, while non-color corrected low pressure sodium and mercury lights are discouraged.

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Additional Examples of Low-Rise Office Buildings

















From the Piedmont to the Potomac

















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From the Piedmont to the Potomac

















Site Design

As important as the five architectural principles are to the design of the building itself, site design is equally important to the overall image of the office development. When designing a site, the following principles should be considered:

- 1. Fitting the building into the site context.
- 2. Quality of the public space.
- 3. Connections to people and their daily needs.
- 4. Places to walk.
- 5. Enhancing and protecting the natural environment.

Fitting the building into the site context

The site should be designed so that the building responds to its surrounding environment. The site context is defined by existing buildings; road networks; natural land features including grades and slopes, trees, and other significant landscape materials; and water bodies (natural and man-made).

SITE - Strategy 1: Each building is encouraged to be compatible with and enhance the design of adjacent buildings and all other development in the immediate area, so long as the predominant design or design "theme" in the area is one that the County or community wishes to retain, amplify, or encourage.

SITE - Strategy 2: Building and site design are encouraged to fit into the existing context. An office building adjacent to the Rural Area should be designed differently from an office building in the Development Area. Additionally, office buildings adjacent to less dense residential areas should be designed to compliment the scale and character of the existing development while office buildings next to more "urban" residential areas should be designed to compliment the density and character of "urban" development. Site landscaping should utilize indigenous local plant materials. Building materials, roof forms, and scale are encouraged to "take cues" from existing local and/or historical buildings. Buildings should be sited so as to work with the natural slope of the land, not against it, in order to avoid excessive amount of land disturbance leading to destruction of other important land features, including mature trees.

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Office development that is **responsive to the existing site features and the character of the surrounding development** by utilizing parking decks instead of large amounts of surface parking in order to preserve existing mature trees and water features.

Quality of the public space

Whether the public space is created within the building or on the exterior of the building, these spaces are what will contribute most to the overall image of the development since these are the ones that the public sees and uses. The public associates these spaces with the overall quality of the development.

SITE - **Strategy** 3: Create a quality streetscape with enhanced paving, street furniture, landscaping, and lighting that establishes a distinct yet consistent character.





Examples of a quality streetscape with enhanced landscaping and paving that help to create a distinct and consistent character

SITE - Strategy 4: Buildings are encouraged to be oriented to the street, not to an interior parking area. The building should to be the focus of the site design, not the automobile. Primary entrances are encouraged to face the street with secondary entrances occurring from parking areas on the side or to the rear of the building. Buildings with primary entrances from an interior mews are strongly discouraged.



Improper orientation – Buildings should not orient a secondary façade with mechanical equipment facing the primary street



Proper orientation – Building oriented to the primary street with parking located in the rear and underground

SITE - Strategy 5: Open space – in the form of plazas, parks, courtyards, trails, etc. – are encouraged to be incorporated into each site, in order to provide not only recreational amenities but visual relief at the street level. Where possible, these ground level open spaces should complete linkages between the existing community and any existing or planned regional park system and/or within an overall office/mixed-use project.





Plazas and courtyards between office buildings provide needed public amenities and enhance the overall public perception of the development

SITE - Strategy 6: On-site parking should be screened from the street. In cases where parking garages are used, garage entrances should be from a secondary roadway. Parking garages are encouraged to be faced with the same quality material and the same design character as the primary building facade.

SITE - Strategy 7: The number of building and site signs is encouraged to be restricted. Detached signs and billboards that are typical of highway corridors are strongly discouraged. Streetscapes that become overloaded with signs have a cumulative negative effect on the image of the community as a whole.

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SITE - Strategy 8: Mechanical or HVAC units, trash cans, dumpsters, or any other freestanding building appurtenances should not be visible from the street.

SITE - Strategy 9: Extensive landscaping should be provided in accordance with a landscape plan prepared by a licensed professional in the field of landscape architecture. All areas of a site not occupied by buildings, parking lots, or other built improvements are encouraged to be intensively planted with trees, shrubs, groundcover, and grasses. Plant suitability, maintenance, and compatibility with the site and construction features are critical factors that should be considered. Plantings are encouraged to be designed with repetition, structured patterns, and complimentary textures and colors and should reinforce the overall character of the community. All dead or dying trees, standing or fallen, should be removed from the site. By the same token, maximum effort should be made to save fine or mature specimens because of size or relative rarity.

Connections to people and their daily needs

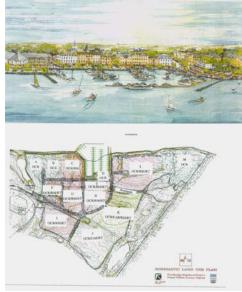
Buildings must function well. This includes how a building is sited, its access, and how it relates to the uses of neighboring buildings.

SITE - Strategy 10: Encourage the extension of street grids into office developments located in office parks or in town centers, in order to create an interconnected network of streets that not only breaks down the scale of development on large parcels but also serves to diffuse traffic at peak hours.

SITE - Strategy 11: Interparcel connectors should be provided to help alleviate traffic on major roadways and in conjunction with fire and rescue service objectives. Pedestrian and vehicular connections that link office uses with residential, retail, and recreational uses are encouraged to be provided.



Proper site connections - An interconnected network of streets and sidewalks connects office, retail and residential uses



Proper site connections - Belmont Town Center: a mixed-use development with office, residential and retail uses within walking distance of each other

SITE - **Strategy** 12: Building and site signage shall follow the regulations of the Zoning Ordinance. Office buildings in more urban areas should consider the location and size of signage in relation to a pedestrian instead of large-scale suburban-style signage that is oriented to the automobile. Neon and backlit signage should not be used, except in areas where such signage may be otherwise deemed appropriate.

Places to walk

Designated places to walk are important not only for safety and health reasons but also for the enjoyment of the outdoor environment.

SITE - Strategy 13: Buildings are encouraged, to foster street vitality by maximizing activity along the street and by creating many openings onto the street.



Mashpee Commons Before: Retail strip mall with retail and professional office; illustrates the domination of the automobile



Mashpee Commons after Redevelopment: A mixed use town center that is pedestrian -friendly

Enhancing and Protecting the Natural Environment

The siting of buildings should avoid excessive amounts of cut and fill as well as clearing of mature trees, wetlands, or other dominant natural land feature. A building should fit into the existing landscape, not destroy it.

SITE - Strategy 14: Excessive amounts of cut and fill and clearing should be avoided, in order to preserve the natural character of the land.

Signature Building Guidelines

There are some locations in the County, such as INNOVATION, that may provide the opportunity for a more stylistic approach to building design. These designs are referred to as "signature architecture," since often they are designed by the best architects of our day and as such carry with them the personal expression of the designer. These signature buildings are also commonly known as "high-design," since they are recognized in the field as the highest and best designs that today's architects are creating. Like a painting done by one of the masters, the high-design building must communicate an artistic expression; however, unlike a two dimensional

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painting, the challenge to the architect is to translate this artistic expression into a three-dimensional architectural form. On occasion signature architecture is specifically inspired by the building's use, as in the case of Dulles Airport Terminal (shown below). It is important to note that although signature buildings do not overtly display a traditional architectural style, high-design buildings still embody the five fundamental elements of architecture. Signature buildings are seen to provide unique interpretations and approaches to scale, rhythm, order, balance, and proportion, as well as color and light. The high-design building – in addition to the architectural fundamentals – utilizes state-of-the-art technological arsenals that promote unique structural design and building forms, materials, lighting, and glazing patterns.











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